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Federal Communications Commission
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## WIRELESS TELECOMMUNICATONS BUREAU

## NEW ENGLAND (REGION 19) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES PLANNING MEETING

The Region 19 (New England) 700 MHz Public Safety Regional Planning Committee announces that the 15th meeting of the Region 700 MHz Public Safety Regional Planning Committee and 4.9GHz will be held Tuesday, June 8, 2004 at 10:00 a.m.- 12:00p.m., at the Brattleboro, Vermont Municipal Center, Grove St., Brattleboro, Vermont 05301

The meeting of the Region 700 MHz National Public Safety Regional Planning committee will convene at 10:00 a.m. The purpose of this meeting is to continue developing a Region plan to meet the needs of the 700 MHz spectrum users including Public Safety, Public Health, Emergency Management and Utility services.

The Region 19 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers whose sole purpose or principal purpose is to protect the safety of life, health, or property in the States of Massachusetts, Rhode Island, Maine, Vermont, New Hampshire, and Connecticut would utilize these frequencies. It is essential that participants be representatives of all eligible public safety providers in order to ensure that each agency's future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent their agency's needs.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band and/or the newly allocated 4.9 GHz band within Region 19 should plan to attend. For further information, please contact:

George Pohorilak, Chairman
Department of Public Safety
1111 Country Club Road
P.O. Box 2794
Middletown, CT 06457-9294

Jerry Zarwanski, Vice-Chairman
Department of Public Safety
1111 Country Club Road
P.O. Box 2794
Middletown, CT 06457-9294

Part 2, Appendix J Phone: 860-685-8108
Fax: 860-685-8363
Email: george.pohorilak@po.state.ct.us

Phone: 860-685-8157
Fax: 860-685-8363
Email: jerry.zarwanski@po.state.ct.us

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# APPENDIX K

# NEW ENGLAND REGION 19
# 47 CFR PART 90 - PRIVATE LAND MOBILE RADIO SERVICES

## Subpart R - Regulations Governing the Licensing and Use of Frequencies in the 764–776 and 794–806 MHz Bands



**§ 90.521 Scope.**
This subpart sets forth the regulations governing the licensing and operations of all systems operating in the 764–776 MHz and 794–806 MHz frequency bands. It includes eligibility, operational, planning and licensing requirements and technical standards for stations licensed in these bands. The rules in this subpart are to be read in conjunction with the applicable requirements contained elsewhere in this part; however, in case of conflict, the provisions of this subpart shall govern with respect to licensing and operation in these frequency bands.

**§ 90.523 Eligibility.**
This section implements the definition of public safety services contained in 47 U.S.C. § 337(f)(1). The following are eligible to hold Commission authorizations for systems operating in the 764–776 MHz and 794–806 MHz frequency bands:

(a) *State or local government entities.* Any territory, possession, state, city, county, town, or similar State or local governmental entity is eligible to hold authorizations in the 764–776 MHz and 794–806 MHz frequency bands.

(b) *Nongovernmental organizations.* A nongovernmental organization (NGO) that provides services, the sole or principal purpose of which is to protect the safety of life, health, or property,

is eligible to hold an authorization for a system operating in the 764–776 MHz and 794–806 MHz frequency bands for transmission or reception of communications essential to providing such services if (and only for so long as) the NGO applicant/licensee:

(1) Has the ongoing support (to operate such system) of a state or local governmental entity whose mission is the oversight of or provision of services, the sole or principal purpose of which is to protect the safety of life, health, or property;

(2) Operates such authorized system solely for transmission of communication essential to providing services the sole or principal purpose of which is to protect the safety of life, health, or property; and

(3) All applications submitted by NGOs must be accompanied by a new, written certification of support (for the NGO applicant to operate the applied for system) by the state or local governmental entity referenced in paragraph (b)(1) of this section.

(c) *All NGO authorizations are conditional.* NGOs assume all risks associated with operating under conditional authority. Authorizations issued to NGOs to operate systems in the 764–776 MHz and 794–806 MHz frequency bands include the following condition: If at any time the supporting governmental entity (see paragraph (b)(1)) notifies the Commission in writing of such governmental entity's termination of its authorization of a NGO's operation of a system in the 764–776 MHz and 794–806 MHz frequency bands, the NGO's application shall be dismissed automatically or, if authorized by the Commission, the NGO's authorization shall terminate automatically.

(d) Paragraphs (a) and (b) notwithstanding, no entity is eligible to hold an authorization for a system operating in the 764–776 MHz and 794–806 MHz frequency bands on the basis of services, the sole or principal purpose of which is to protect the safety of life, health or property, that such entity makes commercially available to the public.

**§ 90.525 Administration of Interoperability channels**

(a) States are responsible for administration of the Interoperability channels in the 764–776 MHz and 794–806 MHz frequency bands. Base and control stations must be licensed individually. A public safety entity meeting the requirements of § 90.523 may operate mobile or portable units on the Interoperability channels in the 764–776 MHz and 794–806 MHz frequency bands without a specific authorization from the Commission provided it holds a part 90 license. All persons operating mobile or portable units under this authority are responsible for compliance with part 90 of these rules and other applicable federal laws.

(b) License applications for Interoperability channels in the 764–776 MHz and 794–806 MHz frequency bands must be approved by a state-level agency or organization responsible for administering state emergency communications. States may hold the licenses for Interoperability channels or approve other qualified entities to hold such licenses. States may delegate the approval process for Interoperability channels to another entity, such as regional planning committees.

**§ 90.527 Regional plan requirements.**

Each regional planning committee must submit a regional plan for approval by the Commission.

(a) *Common elements.* Regional plans must incorporate the following common elements:

(1) Identification of the document as the regional plan for the defined region with the names, business addresses, business telephone numbers, and organizational affiliations of the chairpersons and all members of the planning committee.

(2) A summary of the major elements of the plan and an explanation of how all eligible entities within the region were given an opportunity to participate in the planning process and to have their positions heard and considered fairly.

(3) A general description of how the spectrum would be allotted among the various eligible users within the region with an explanation of how the requirements of all eligible entities within the region were considered and, to the degree possible, met.

(4) An explanation as to how needs were assigned priorities in areas where not all eligible entities could receive licenses.

(5) An explanation of how the plan had been coordinated with adjacent regions.

(6) A detailed description of how the plan put the spectrum to the best possible use by requiring system design with minimum coverage areas, by assigning frequencies so that maximum frequency reuse and offset channel use may be made, by using trunking, and by requiring small entities with minimal requirements to join together in using a single system where possible.

(7) A detailed description of the future planning process, including, but not limited to, amendment process, meeting announcements, data base maintenance, and dispute resolution.

(8) A certification by the regional planning chairperson that all planning committee meetings, including subcommittee or executive committee meetings, were open to the public.

(b) *Modification of regional plans.* Regional plans may be modified by submitting a written request, signed by the regional planning committee, to the Chief, Wireless Telecommunications Bureau. The request must contain the full text of the modification, and must certify that successful coordination of the modification with all adjacent regions has occurred and that all such regions concur with the modification.

**§ 90.529 State License.**

(a) Narrowband channels designated as state channels in § 90.531 are licensed to each state (as defined in § 90.7) as follows:

(1) Each state that chooses to take advantage of the spectrum designated as state channels must file an application for up to 2.4 megahertz of this spectrum no later than December 31, 2001. For purposes of this section, the elected chief executive (Governor) of each state, or his or her designee, shall be deemed the person authorized to apply for the State License.

(2) What ever part of this 2.4 megahertz that a state has not applied for by December 31, 2001, will revert to General Use and be administered by the relevant RPC (or RPCs in the instances of states that encompass multiple RPCs).

(b) Each state license will be granted subject to the condition that the state certifies on or before each applicable benchmark date that it is:

(1) providing or prepared to provide "substantial service" to one-third of their population or territory by January 1, 2012, *i.e.*, within five years of the date that incumbent broadcasters are required to relocate to other portions of the spectrum;

(2) providing or prepared to provide "substantial service" to two-thirds of their population or territory by January 1, 2017, *i.e.*, within ten years of the date that incumbent broadcasters are required to relocate to other portions of the spectrum.

(c) The Commission will deem a state "prepared to provide substantial service" if the licensee certifies that a radio system has been approved and funded for implementation by the deadline date. "Substantial service" refers to the construction and operation of 700 MHz facilities by public safety entities providing service which is sound, favorable , and substantially above a level of mediocre service which just might minimally warrant renewal.

(d) If a state licensee fails to meet any condition of the grant the state license is modified automatically to the frequencies and geographic areas where the state certifies that it is providing substantial service.

(e) Any recovered state license spectrum will revert to General Use. However, spectrum licensed to a state under a state license remains unavailable for reassignment to other applicants until the Commission's database reflects the parameters of the modified state license.

**§ 90.531 Band plan.**
This section sets forth the band plan for the 764–776 MHz and 794–806 MHz public safety bands.

(a) *Base and mobile use.* The 764–776 MHz band may be used for base, mobile or fixed (repeater) transmissions. The 794–806 MHz band may be used only for mobile or fixed (control) transmissions.

(b) *Narrowband segments.* There are four band segments that are designated for use with narrowband emissions. Each of these narrowband segments is divided into 480 channels having a channel size of 6.25 kHz as follows:

| Frequency range | Channel Nos. |
|---|---|
| 764–767 MHz | 1–480 |
| 773–776 MHz | 481–960 |
| 794–797 MHz | 961–1440 |
| 803–806 MHz | 1441–1920 |

(1) *Narrowband interoperability channels.* The following narrowband channels are designated for nationwide interoperability licensing and use:

23, 24, 39, 40, 63, 64, 79, 80, 103, 104, 119, 120,143, 144, 159, 160, 183, 184, 199, 200, 223, 224, 239, 240, 263, 264, 279, 280, 303, 304, 319, 320, 641, 642, 657, 658, 681, 682, 697, 698, 721, 722, 737, 738, 761, 762, 777, 778, 801, 802, 817, 818, 841, 842, 857, 858, 881, 882, 897, 898, 921, 922, 937, 938, 983, 984, 999, 1000, 1023, 1024, 1039, 1040, 1063, 1064, 1079, 1080, 1103, 1104, 1119, 1120, 1143, 1144, 1159, 1160, 1183, 1184, 1199, 1200, 1223, 1224, 1239, 1240, 1263, 1264, 1279, 1280, 1601, 1602, 1617, 1618, 1641, 1642, 1657, 1658, 1681, 1682, 1697, 1698, 1721, 1722, 1737, 1738, 1761, 1762, 1777, 1778, 1801, 1802, 1817, 1818, 1841, 1842, 1857, 1858, 1881, 1882, 1897, 1898.

(i) *Narrowband data Interoperability channels.* The following channel pairs are reserved nationwide for the express purpose of data transmission only: 279/1239, 280/1240, 921/1881, and 922/1882.

(ii) *Narrowband calling Interoperability channels.* The following channel pairs are dedicated nationwide for the express purpose of *Interoperability* calling only: 39/999, 40/1000, 681/1641, and 682/1642. They may not be used primarily for routine, day-to-day communications. Encryption is prohibited on the designated calling channels.

(iii) *Narrowband trunking Interoperability channels.* The following interoperability channel pairs may be combined with the appropriate adjacent secondary trunking channel pairs and used in the trunked mode on a secondary basis to conventional interoperability operations: 23/983, 24/984, 63/1023, 64/1024, 103/1063, 104/1064, 143/1103, 144/1104, 183/1143, 184/1144, 223/1183, 224/1184, 263/1223, 264/1124, 303/1263 and 304/1264. For every ten general use channels trunked at a station, entities may obtain a license to operate in the trunked mode on two of the above contiguous Interoperability channel pairs. The maximum number of Interoperability channel pairs that can be trunked at any one location is eight.

(2) *Narrowband reserve channels.* The following narrowband channels are undesignated and reserved: 117, 118, 157, 158, 197, 198, 237, 238, 643, 644, 659, 660, 683, 684, 699, 700, 723, 724, 739, 740, 763, 764, 779, 780, 803, 804, 819, 820, 843, 844, 859, 860, 883, 884, 899, 900, 923, 924, 939, 940, 1077, 1078, 1117, 1118, 1157, 1158, 1197, 1198, 1603, 1604, 1619, 1620, 1643, 1644, 1659, 1660, 1683, 1684, 1699, 1700, 1723, 1724, 1739, 1740, 1763, 1764, 1779, 1780, 1803, 1804, 1819,1820, 1843, 1844, 1859, 1860, 1883, 1884, 1899, 1900.

(3) *Narrowband low power channels subject to regional planning.* The following narrowband channels are designated for low power use for on-scene incident response purposes using mobiles and portables subject to Commission-approved regional planning committee regional plans. Transmitter power must not exceed 2 watts (ERP): Channels 1–8 paired with Channels 961–968, and Channels 949–958 paired with Channels 1909–1918.

(4) *Narrowband low power itinerant channels.* The following narrowband channels are designated for low power use for on-scene incident response purposes using mobiles and portables. These channels are licensed nationwide for itinerant operation. Transmitter power must not exceed 2 watts (ERP): Channels 9–12 paired with Channels 969–972 and Channels 959–960 paired with Channels 1919–1920.

(5) *Narrowband state channel.* The following narrowband channels are designated for direct licensing to each state (including U.S. territories, districts, and possessions):
25–36, 65–76, 105–116, 145–156, 185–196, 225–236, 265–276, 305–316, 645–656, 685–696, 725–736, 765–776, 805–816, 845–856, 885–896, 925–936, 985–996, 1025–1036, 1065–1076, 1105–1116, 1145–1156, 1185–1196, 1225–1236, 1265–1276, 1605–1616, 1645–1656, 1685–1696, 1725–1736, 1765–1776, 1805–1816, 1845–1856, 1885–1896.

(6) *Narrowband general use channels.* All narrowband channels established in paragraph (b) of this section, other than those listed in paragraphs (b)(1), (b)(2), (b)(4) and (b)(5) of

this section are designated for assignment to public safety eligibles subject to Commission-approved regional planning committee regional plans.

(7) *Secondary trunking channels.* The following channels pairs are reserved for secondary trunking operations: 21/981, 22/982, 61/1021, 62/1022, 101/1061, 102/1062, 141/1101, 142/1102, 181/1141, 182/1142, 221/1181, 222/1182, 261/1221, 262/1222, 301/1261 and 302/1262. They may be used only in combination with the appropriate adjacent Interoperability channel pairs specified in (b)(1)(iii) of this section in trunked systems.

(c) *Wideband segments.* There are two band segments that are designated for use with wideband emissions. Each of these wideband segments is divided into 120 channels having a channel size of 50 kHz as follows:

| Frequency range | Channel Nos. |
|---|---|
| 767–773 MHz | 1–120 |
| 797–803 MHz | 121–240. |

(1) *Wideband interoperability channels.* The following wideband channels are designated for nationwide interoperability licensing and use: 28–30, 37–39, 46–48, 73–75, 83–84, 91–93, 148–150, 157–159, 166–168, 193–195, 202–204, 211–213.

(2) *Wideband reserve channels.* The following wideband channels are reserved: 1–27, 94–120, 121–147, 214–240.

(3) *Wideband general use channels.* All wideband channels established in paragraph (c), except for those listed in paragraphs (c)(1) and (c)(2) of this section, are designated for assignment to public safety eligibles subject to Commission-approved regional planning committee regional plans.

(d) *Combining channels.* At the discretion of the appropriate regional planning committee, contiguous channels may be used in combination in order to accommodate requirements for larger bandwidth emissions, in accordance with this paragraph. As an exception to this general rule, channels designated for nationwide interoperability use must not be combined with channels that are not designated for nationwide interoperability use.

(1) *Narrowband.* Two or four contiguous narrowband (6.25 kHz) channels may be used in combination as 12.5 kHz or 25 kHz channels, respectively. The lower (in frequency) channel for two channel combinations must be an odd (*i.e.*, 1, 3, 5, 7 * * *) numbered channel. The lowest (in frequency) channel for four channel combinations must be a channel whose number is equal to 1+(4 x n), where n = any integer between 0 and 479, inclusive (*e.g.*, channel number 1, 5, * * * 1917). Channel combinations are designated by the lowest and highest channel numbers separated by a hyphen, *e.g.*, "1–2" for a two channel combination and "1–4" for a four channel combination.

(2) *Wideband.* Two or three contiguous wideband (50 kHz) channels may be used in combination as 100 kHz or 150 kHz channels, respectively. The lower (in frequency) channel for two channel combinations must be a channel whose number is equal to 1+(3 x n) or 2+(3 x n), where n = any integer between 0 and 79, inclusive (*e.g.*, channel number 1, 2, 5, 6, * * * 238,

239). The lowest (in frequency) channel for three channel combinations must be a channel whose number is equal to 1+(3 x n), where n = any integer between 0 and 79, inclusive (*e.g.*, channel number 1, 5, * * * 238). Channel combinations are designated by the lowest and highest channel numbers separated by a hyphen, *e.g.*, "1–2" for a two channel combination and "1–3" for a three channel combination.

(e) *Channel pairing.* In general, channels must be planned and assigned in base/mobile pairs that are separated by 30 MHz. However, until December 31, 2006, channels other than those listed in paragraphs (b)(1) and (c)(1), may be planned and assigned in base/mobile pairs having a different separation, where necessary because 30 MHz base/mobile pairing is precluded by the presence of one or more co-channel or adjacent channel TV/DTV broadcast stations.

**§ 90.533 Transmitting sites near the U.S./Canada or U.S./Mexico border.**
This section applies to each license to operate one or more public safety transmitters in the 764–776 MHz and 794–806 MHz bands, at a location or locations North of Line A (see § 90.7) or within 120 kilometers (75 miles) of the U.S.-Mexico border, until such time as agreements between the government of the United States and the government of Canada or the government of the United States and the government of Mexico, as applicable, become effective governing border area non-broadcast use of these bands. Public safety licenses are granted subject to the following conditions:

(a) Operation of public safety transmitters must not cause harmful interference to the reception of television broadcasts transmitted by UHF TV broadcast stations located in Canada or Mexico. In addition, public safety base, control, and mobile transmitters must comply with the interference protection criteria in § 90.545 for TV/DTV stations in Canada and Mexico.

(b) Public safety facilities must accept any interference that may be caused by operations of UHF television broadcast transmitters in Canada and Mexico.

(c) Conditions may be added during the term of the license, if required by the terms of international agreements between the government of the United States and the government of Canada or the government of the United States and the government of Mexico, as applicable, regarding non-broadcast use of the 764–776 MHz and 794–806 MHz bands.

**§ 90.535 Modulation and spectrum usage efficiency requirements.**
Transmitters designed to operate in 764–776 MHz and 794–806 MHz frequency bands must meet the following modulation standards:

(a) All transmitters in the 764–776 MHz and 794–806 MHz frequency bands must use digital modulation. Mobile and portable transmitters may have analog modulation capability only as a secondary mode in addition to its primary digital mode. Mobile and portable transmitters that only operate on the low power channels designated in §§ 90.531(b)(3), 90.531(b)(4), are exempt from this digital modulation requirement.

(b) Transmitters designed to operate in the narrowband segment using digital modulation must be capable of maintaining a minimum data rate of 4.8 kbps per 6.25 kHz of bandwidth.

(c) Transmitters designed to operate in the wideband segment using digital modulation must be capable of maintaining a minimum data rate of 384 kbps per 150 kHz of bandwidth.

**§ 90.537 Trunking requirement.**

(a) *General use channels.* All systems using six or more narrowband channels in the 764–776 MHz and 794–806 MHz frequency bands must be trunked systems, except for those described in paragraph (b) of this section.

(b) *Interoperability channels.* Trunking is permitted only on Interoperability channels specified in § 90.531(b)(1)(iii). Trunked use must be strictly on a secondary, non-interference basis to conventional operations. The licensee must monitor and immediately release these channels when they are needed for interoperability purposes.

**§ 90.539 Frequency stability.**

Transmitters designed to operate in 764–776 MHz and 794–806 MHz frequency bands must meet the frequency stability requirements in this section.

(a) Mobile, portable and control transmitters must normally use automatic frequency control (AFC) to lock on to the base station signal.

(b) The frequency stability of base transmitters operating in the narrowband segment must be 100 parts per billion or better.

(c) The frequency stability of mobile, portable, and control transmitters operating in the narrowband segment must be 400 parts per billion or better when AFC is locked to the base station. When AFC is not locked to the base station, the frequency stability must be at least 1.0 ppm for 6.25 kHz, 1.5 ppm for 12.5 kHz (2 channel aggregate), and 2.5 ppm for 25 kHz (4 channel aggregate).

(d) The frequency stability of base transmitters operating in the wideband segment must be 1 part per million or better.

(e) The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

**§ 90.541 Transmitting power limits.**

The transmitting power of base, mobile, portable and control stations operating in the 764–776 MHz and 794–806 MHz frequency bands must not exceed the maximum limits in this section, and must also comply with any applicable effective radiated power limits in § 90.545.

(a) The transmitting power of base transmitters must not exceed the limits given in paragraphs (a), (b) and (c) of § 90.635.

(b) The transmitter output power of mobile and control transmitters must not exceed 30 Watts.

(c) The transmitter output power of portable (hand-held) transmitters must not exceed 3 Watts.

(d) Transmitters operating on the narrowband low power channels listed in §§ 90.531(b)(3), 90.531(b)(4), must not exceed 2 watts (ERP).

**§ 90.543 Emission limitations.**
Transmitters designed to operate in 764–776 MHz and 794–806 MHz frequency bands must meet the emission limitations in this section.

(a) The adjacent channel coupled power (ACCP) requirements for transmitters designed for various channel sizes are shown in the following tables. Mobile station requirements apply to handheld, car mounted and control station units. The tables specify a maximum value for the ACCP relative to maximum output power as a function of the displacement from the channel center frequency. In addition, the ACCP for a mobile station transmitter at the specified frequency displacement must not exceed the value shown in the tables. For transmitters that have power control, the latter ACCP requirement can be met at maximum power reduction. In the following charts, "(s)" means a swept measurement is to be used.

6.25 KHZ MOBILE TRANSMITTER ACCP REQUIREMENTS

| Offset from Center Frequency (kHz) | Measurement Bandwidth (kHz) | Maximum ACCP Relative (dBc) | Maximum ACCP Absolute (dBm) |
|---|---|---|---|
| 6.25 | 6.25 | -40 | (1) |
| 12.5 | 6.25 | -60 | -45 |
| 18.75 | 6.25 | -60 | -45 |
| 25 | 6.25 | -65 | -50 |
| 37.5 | 25 | -65 | -50 |
| 62.5 | 25 | -65 | -50 |
| 87.5 | 25 | -65 | -50 |
| 150 | 100 | -65 | -50 |
| 250 | 100 | -65 | -50 |
| >400 to receive band | 30(s) | -75 | -55 |
| in the receive band | 30(s) | -100 | -70 |

(1) Not specified.

12.5 KHZ MOBILE TRANSMITTER ACCP REQUIREMENTS

| Offset from Center Frequency (kHz) | Measurement Bandwidth (kHz) | Maximum ACCP Relative (dBc) | Maximum ACCP Absolute (dBm) |
|---|---|---|---|
| 9.375 | 6.25 | -40 | (1) |
| 15.625 | 6.25 | -60 | -45 |
| 21.875 | 6.25 | -60 | -45 |
| 37.5 | 25 | -65 | -50 |
| 62.5 | 25 | -65 | -50 |
| 87.5 | 25 | -65 | -50 |
| 150 | 100 | -65 | -50 |
| 250 | 100 | -65 | -50 |
| >400 to receive band | 30(s) | -75 | -55 |
| in the receive band | 30(s) | -100 | -70 |

(1) Not specified.

25 KHZ MOBILE TRANSMITTER ACCP REQUIREMENTS

| Offset from Center Frequency (kHz) | Measurement Bandwidth (kHz) | Maximum ACCP Relative (dBc) | Maximum ACCP Absolute (dBm) |
|---|---|---|---|
| 15.625 | 6.25 | -40 | (1) |
| 21.875 | 6.25 | -60 | -45 |
| 37.5 | 25 | -65 | -50 |
| 62.5 | 25 | -65 | -50 |
| 87.5 | 25 | -65 | -50 |
| 150 | 100 | -65 | -50 |
| 250 | 100 | -65 | -50 |
| >400 to receive band | 30(s) | -75 | -55 |
| in the receive band | 30(s) | -100 | -70 |

(1) Not specified.

150 KHZ MOBILE TRANSMITTER ACCP REQUIREMENTS

| Offset from Center Frequency (kHz) | Measurement Bandwidth (kHz) | Maximum ACCP Relative (dBc) | Maximum ACCP Absolute (dBm) |
|---|---|---|---|
| 100 | 50 | -40 | (1) |
| 200 | 50 | -50 | -35 |
| 300 | 50 | -50 | -35 |
| 400 | 50 | -50 | -35 |
| 600 to 1000 | 30(s) | -60 | -45 |
| 1000 to receive band | 30(s) | -70 | -55 |
| in the receive band | 30(s) | -100 | -75 |

(1) Not specified.

6.25 KHZ BASE TRANSMITTER ACCP REQUIREMENTS

| Offset from Center Frequency (kHz) | Measurement Bandwidth (kHz) | Maximum ACCP (dBc) |
|---|---|---|
| 6.25 | 6.25 | -40 |
| 12.5 | 6.25 | -60 |
| 18.7 | 6.25 | -60 |
| 25 | 6.25 | -65 |
| 37.5 | 25 | -65 |
| 62.5 | 25 | -65 |
| 87.5 | 25 | -65 |
| 150 | 100 | -65 |
| 250 | 100 | -65 |
| >400 to receive band | 30(s) | (1) |
| in the receive band | 30(s) | -100 |

(1) -80 (continues @-6dB/oct)

12.5 KHZ BASE TRASMITTER ACCP REQUIREMENTS

| Offset from Center Frequency (kHz) | Measurement Bandwidth (kHz) | Maximum ACCP Relative (dBc) |
|---|---|---|
| 9.375 | 6.25 | -40 |
| 15.625 | 6.25 | -60 |
| 21.875 | 6.25 | -60 |
| 37.5 | 25 | -60 |
| 62.5 | 25 | -65 |
| 87.5 | 25 | -65 |
| 150 | 100 | -65 |
| 250 | 100 | -65 |
| >400 to receive band | 30(s) | (1) |
| in the receive band | 30(s) | -100 |

(1) -80 (continues @-6dB/oct)

25 KHZ BASE TRANSMITTER ACCP REQUIREMENTS

| Offset from Center Frequency (kHz) | Measurement Bandwidth (kHz) | Maximum ACCP Relative (dBc) |
|---|---|---|
| 15.625 | 6.25 | -40 |
| 21.875 | 6.25 | -60 |
| 37.5 | 25 | -60 |
| 62.5 | 25 | -65 |
| 87.5 | 25 | -65 |
| 150 | 100 | -65 |
| 250 | 100 | -65 |
| >400 to receive band | 30(s) | (1) |
| in the receive band | 30(s) | -100 |

(1) -80 (continues @-6dB/oct)

150 KHZ BASE TRANSMITTER ACCP REQUIREMENTS

| Offset from Center Frequency (kHz) | Measurement Bandwidth (kHz) | Maximum ACCP Relative (dBc) |
|---|---|---|
| 100 | 50 | -40 |
| 200 | 50 | -50 |
| 300 | 50 | -55 |
| 400 | 50 | -60 |
| 600 to 1000 | 30(s) | -65 |
| 1000 to receive band | 30(s) | (1) |
| in the receive band | 30(s) | -100 |

(1) -75 (continues @ -6dB/oct)

(b) *ACCP measurement procedure.* The following are procedures for making transmitter measurements. For time division multiple access (TDMA) systems, the measurements are to be made under TDMA operation only during time slots when the transmitter is on. All measurements must be made at the input to the transmitter's antenna. Measurement bandwidth used below implies an instrument that measures the power in many narrow bandwidths (e.g. 300 Hz) and integrates these powers across a larger band to determine power in the measurement bandwidth.

(1) *Setting reference level.* Using a spectrum analyzer capable of ACCP measurements, set the measurement bandwidth to the channel size. For example, for a 6.25 kHz transmitter, set the measurement bandwidth to 6.25 kHz; for a 150 kHz transmitter, set the measurement bandwidth to 150 kHz. Set the frequency offset of the measurement bandwidth to zero and adjust the center frequency of the spectrum analyzer to give the power level in the measurement bandwidth. Record this power level in dBm as the "reference power level".

(2) *Measuring the power level at frequency offsets <600kHz.* Using a spectrum analyzer capable of ACCP measurements, set the measurement bandwidth as shown in the tables above. Measure the ACCP in dBm. These measurements should be made at maximum power. Calculate the coupled power by subtracting the measurements made in this step from the reference power measured in the previous step. The absolute ACCP values must be less than the values given in the table for each condition above.

(3) *Measuring the power level at frequency offsets >600kHz.* Set a spectrum analyzer to 30 kHz resolution bandwidth, 1 MHz video bandwidth and sample mode detection. Sweep □6 MHz from the carrier frequency. Set the reference level to the RMS value of the transmitter power and note the absolute power. The response at frequencies greater than 600 kHz must be less than the values in the tables above.

(4) *Upper power limit measurement.* The absolute coupled power in dBm measured above must be compared to the table entry for each given frequency offset. For those mobile stations with power control, these measurements should be repeated with power control at maximum power reduction. The absolute ACCP at maximum power reduction must be less than the values in the tables above.

(c) *Out-of-band emission limit.* On any frequency outside of the frequency ranges covered by the ACCP tables in this section, the power of any emission must be reduced below the unmodulated carrier power (P) by at least 43 + 10 log (P) dB.

(d) *Authorized bandwidth.* Provided that the ACCP requirements of this section are met, applicants may request any authorized bandwidth that does not exceed the channel size.

(e) For operations in the 764 to 776 MHz and 794 to 806 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to –70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

(f) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

**§ 90.545 TV/DTV interference protection criteria.**

Public safety base, control, and mobile transmitters in the 764–776 MHz and 794–806 MHz frequency bands must be operated only in accordance with the rules in this section, to reduce the potential for interference to public reception of the signals of existing TV and DTV broadcast stations transmitting on TV Channels 62, 63, 64, 65, 67, 68 or 69.

(a) *D/U ratios.* Licensees of public safety stations must choose site locations that are a sufficient distance from co-channel and adjacent channel TV and DTV stations, and/or must use reduced transmitting power or transmitting antenna height such that the following minimum desired signal to undesired signal ratios (D/U ratios) are met:

(1) The minimum D/U ratio for co-channel stations is 40 dB at the hypothetical Grade B contour (64 dBμV/m) (88.5 kilometers or 55.0 miles) of the TV station or 17 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers or 55.0 miles) of the DTV station.

(2) The minimum D/U ratio for adjacent channel stations is 0 dB at the hypothetical Grade B contour (64 dBμV/m) (88.5 kilometers or 55.0 miles) of the TV station or -23 dB at the equivalent Grade B contour (41 dBμV/m) (88.5 kilometers or 55.0 miles) of the DTV station.

(b) *Maximum ERP and HAAT.* The maximum effective radiated power (ERP) and the antenna height above average terrain (HAAT) of the proposed land mobile base station, the associated control station, and the mobile transmitters shall be determined using the methods described in this section.

(1) Each base station is limited to a maximum ERP of 1000 watts.

(2) Each control station is limited to a maximum ERP of 200 watts and a maximum HAAT of 61 m. (200 ft).

(3) Each mobile station is limited to a maximum ERP of 30 watts and a maximum antenna height of 6.1 m. (20 ft.).

(4) Each portable (handheld) transmitter is limited to a maximum ERP of 3 watts.

(5) All transmitters are subject to the power reductions given in Figure B of § 90.309 of this chapter, for antenna heights higher than 152 meters (500 ft).

(c) *Methods.* The methods used to calculate TV contours and antenna heights above average terrain are given in §§ 73.683 and 73.684 of this chapter. Tables to determine the necessary minimum distance from the public safety station to the TV/DTV station, assuming that the TV/DTV station has a hypothetical or equivalent Grade B contour of 88.5 kilometers (55.0

miles), are located in § 90.309 and labeled as Tables B, D, and E. Values between those given in the tables may be determined by linear interpolation. The locations of existing and proposed TV/DTV stations during the transition period are given in Part 73 of this chapter and in the final proceedings of MM Docket No. 87–268. The DTV allotments are:

| State | City | NTSC TV Ch. | DTV Ch. | ERP (kW) | HAAT (m) |
|---|---|---|---|---|---|
| California | Stockton | 64 | 62 | 63.5 | 874 |
| California | Los Angeles | 11 | 65 | 688.7 | 896 |
| California | Riverside | 62 | 68 | 180.1 | 723 |
| California | Concord | 42 | 63 | 61.0 | 856 |
| Pennsylvania | Allentown | 39 | 62 | 50.0 | 302 |
| Pennsylvania | Philadelphia | 6 | 64 | 1000.0 | 332 |
| Pennsylvania | Philadelphia | 10 | 67 | 791.8 | 354 |
| Puerto Rico | Aguada | 50 | 62 | 50.0 | 343 |
| Puerto Rico | Mayaguez | 16 | 63 | 50.0 | 347 |
| Puerto Rico | Naranjito | 64 | 65 | 50.0 | 142 |
| Puerto Rico | Aguadilla | 12 | 69 | 691.8 | 665 |

The transition period is scheduled to end on December 31, 2006. After that time, unless otherwise directed by the Commission, public safety stations will no longer be required to protect reception of co-channel or adjacent channel TV/DTV stations.

(1) Licensees of stations operating within the ERP and HAAT limits of paragraph (b) must select one of three methods to meet the TV/DTV protection requirements, subject to Commission approval:

(i) utilize the geographic separation specified in the tables referenced below;

(ii) submit an engineering study justifying the proposed separations based on the actual parameters of the land mobile station and the actual parameters of the TV/DTV station(s) it is trying to protect; or,

(iii) obtain written concurrence from the applicable TV/DTV station(s). If this method is chosen, a copy of the agreement must be submitted with the application.

(2) The following is the method for geographic separations.

(i) Base stations having an antenna height (HAAT) less than 152 m. (500 ft.) shall afford protection to co-channel and adjacent channel TV/DTV stations in accordance with the values specified in Table B (co-channel frequencies based on 40 dB protection) and Table E (adjacent channel frequencies based on 0 dB protection) in § 90.309 of this part. For base stations having an antenna height (HAAT) between 152–914 meters (500–3,000 ft.) the effective radiated power must be reduced below 1 kilowatt in accordance with the values shown in the power reduction graph in Figure B in § 90.309 of this part. For heights of more than 152 m. (500 ft.) above average terrain, the distance to the radio path horizon will be calculated assuming smooth earth. If the distance so determined equals or exceeds the distance to the hypothetical or equivalent Grade B contour of a co-channel TV/DTV station (*i.e.*, it exceeds the distance from the appropriate Table in § 90.309 to the relevant TV/DTV station) an authorization will not be granted unless it can be shown in an engineering study (method 2) that actual terrain considerations are such as to provide the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m for DTV stations), or that the effective radiated power will be further reduced so that, assuming free space attenuation, the desired protection at the actual Grade B contour (64 dBμV/m for TV and 41 dBμV/m coverage contour for DTV stations) will

be achieved. Directions for calculating powers, heights, and reduction curves are listed in § 90.309 for land mobile stations. Directions for calculating coverage contours are listed in §§ 73.683–685 for TV stations and in § 73.625 for DTV stations.

(ii) Control and mobile stations (including portables) are limited in height and power and therefore shall afford protection to co-channel and adjacent channel TV/DTV stations in accordance with the values specified in Table D (co-channel frequencies based on 40 dB protection) in § 90.309 of this part and a minimum distance of 8 kilometers (5 miles) from all adjacent channel TV/DTV station hypothetical or equivalent Grade B contours (adjacent channel frequencies based on 0 dB protection for TV stations and -23 dB for DTV stations). Since control and mobile stations may affect different TV/DTV stations than the associated base station, particular care must be taken by applicants to ensure that all the appropriate TV/DTV stations are considered (*e.g.*, a base station may be operating on TV Channel 64 and the mobiles on TV Channel 69, in which case TV Channels 63, 64, 65, 68, and 69 must be protected). Since mobiles and portables are able to move and communicate with each other, licensees or coordinators must determine the areas where the mobiles can and cannot roam in order to protect the TV/DTV stations, and advise the mobile operators of these areas and their restrictions.

(iii) In order to protect certain TV/DTV stations and to ensure protection from these stations which may have extremely large contours due to unusual height situations, an additional distance factor must be used by all public safety base, control and mobile stations. For all co-channel and adjacent channel TV/DTV stations which have an HAAT between 350 and 600 meters, public safety stations must add the following DISTANCE FACTOR to the value obtained from the referenced Tables in § 90.309 and to the distance for control and mobile stations on adjacent TV/DTV channels (96.5 km).

DISTANCE FACTOR = (TV/DTV HAAT-350) ÷14 in kilometers, where HAAT is the TV or DTV station antenna height above average terrain obtained from its authorized or proposed facilities, whichever is greater.

(iv) For all co-channel and adjacent channel TV/DTV stations which have an antenna height above average terrain greater than 600 meters, public safety stations must add 18 kilometers as the DISTANCE FACTOR to the value obtained from the referenced Tables in § 90.309 and to the distance for control and mobile stations on adjacent TV/DTV channels (96.5 km).

NOTE TO § 90.545: The 88.5 km (55.0 mi) Grade B service contour (64 dBμV/m) is based on a hypothetical TV station operating at an effective radiated power of one megawatt, a transmitting antenna height above average terrain of 610 meters (2000 feet) and the Commission's R–6602 F(50,50) curves. *See* § 73.699 of this chapter. Maximum facilities for TV stations operating in the UHF band are 5 megawatts effective radiated power at an antenna HAAT of 610 meters (2,000 feet). *See* § 73.614 of this chapter. The equivalent contour for DTV stations is based on a 41 dBμV/ m signal strength and the distance to the F(50,90) curve. *See* § 73.625 of this chapter.

**§ 90.547 Interoperability channel capability requirement.**

Except as noted below, mobile and portable transmitters operating in the 764–776 MHz and 794–806 MHz frequency bands must be capable of operating on all of the designated nationwide narrowband Interoperability channels pursuant to the standards specified in this part.

(a) Mobile and portable transmitters that are designed to operate only on the Low Power Channels specified in §§ 90.531(b)(3) and (b)(4) are exempt from this Interoperability channel requirement.

(b) Mobile and portable transmitters that are designed to operate only on the narrowband data Interoperability channels specified in § 90.531 (b)(1)(i) are exempt from this Interoperability channel requirement.

(c) Mobile and portable transmitters that are designed to operate only in the voice mode do not have to operate on the narrowband data Interoperability channels specified in § 90.531 (b)(1)(i).

**§ 90.548 Interoperability technical standards.**

(a) Transmitters operating on those narrowband channels in the 764–776 and 794–806 MHz band designated for interoperability (*See* 90.531) shall conform to the following technical standards:

(1) Transmitters designed for voice operation shall include a 12.5 kHz bandwidth mode of operation conforming to the following standards: ANSI/TIA/EIA 102.BAAA–1 (common air interface) for operation in the 12.5 kHz FDM mode; ANSI/TIA/EIA 102.BABA (vocoder).

(2) Transmitters designed for data transmission shall include a 12.5 kHz bandwidth mode of operation conforming to the following standards: ANSI/TIA/EIA 102.BAEA (data overview); ANSI/TIA/EIA 102.BAEB (packet data specification); ANSI/TIA/EIA 102.BAEC (circuit data specification); ANSI/TIA/EIA 102.BAEA (radio control protocol); ANSI/TIA/EIA 102.BAAA–1 (common air interface) for operation in the 12.5 kHz FDM mode.

(b) Copies of the standards listed in this Section that are incorporated by reference can be purchased from the American National Standards Institute, Washington, DC Headquarters, 1819 L Street, NW, 6th Floor, Washington, DC 20036.

(c) Copies of the standards listed in this Section that are incorporated by reference may be inspected at the Federal Communications Commission, 445 12th Street, SW, Washington, DC (Reference Information Center) or at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington DC.

**§ 90.549 Transmitter certification.**

Transmitters operated in the 764–776 MHz and 794–806 MHz frequency bands must be certificated as required by § 90.203.

**§ 90.551 Construction requirements.**

Each station authorized under this subpart to operate in the 764–776 MHz and 794–806 MHz frequency bands must be constructed and placed into operation within 12 months from the date of grant of the authorization. However, licensees may request a longer construction period, up to but not exceeding 5 years, pursuant to § 90.155(b).

**§ 90.553 Encryption.**

(a) Encryption is permitted on all but the two nationwide Interoperability calling channels. Radios employing encryption must have a readily accessible switch or other readily accessible control that permits the radio user to disable encryption.

(b) If Encryption is employed then the following encryption protocol must be used: TIA/EIA IS AAAA–A Project 25 DES.

(c) Copies of the standards listed in this Section that are incorporated by reference can be purchased from TIA/EIA, 2500 Wilson Boulevard, Arlington, VA, 22201, or Global Engineering Documents, 155 Inverness Way East, Englewood, CO 80112.

# APPENDIX L
# REGION 19 - NEW ENGLAND CHANNEL ALLOTMENT

| County | Class | Band Width | FCC | Base | Mobile | Notation |
|---|---|---|---|---|---|---|
| Fairfield County, Connecticut | General Use | Voice 25KHz | 85-88 | 764.5375 | 794.5375 | |
| | General Use | Voice 25KHz | 173-176 | 765.0875 | 795.0875 | |
| | General Use | Voice 25KHz | 253-256 | 765.5875 | 795.5875 | |
| | General Use | Voice 25KHz | 357-360 | 766.2375 | 796.2375 | |
| | General Use | Voice 25KHz | 405-408 | 766.5375 | 796.5375 | |
| | General Use | Voice 25KHz | 445-448 | 766.7875 | 796.7875 | |
| | General Use | Voice 25KHz | 793-796 | 774.9625 | 804.9625 | |
| | General Use | Voice 25KHz | 833-836 | 775.2125 | 805.2125 | |
| Hartford County, Connecticut | General Use | Voice 25KHz | 41-44 | 764.2625 | 794.2625 | |
| | General Use | Voice 25KHz | 81-84 | 764.5125 | 794.5125 | |
| | General Use | Voice 25KHz | 121-124 | 764.7625 | 794.7625 | |
| | General Use | Voice 25KHz | 201-204 | 765.2625 | 795.2625 | |
| | General Use | Voice 25KHz | 241-244 | 765.5125 | 795.5125 | |
| | General Use | Voice 25KHz | 297-300 | 765.8625 | 795.8625 | |
| | General Use | Voice 25KHz | 369-372 | 766.3125 | 796.3125 | |
| | General Use | Voice 25KHz | 409-412 | 766.5625 | 796.5625 | |
| | General Use | Voice 25KHz | 449-452 | 766.8125 | 796.8125 | |
| | General Use | Voice 25KHz | 501-504 | 773.1375 | 803.1375 | |
| | General Use | Voice 25KHz | 541-544 | 773.3875 | 803.3875 | |
| | General Use | Voice 25KHz | 589-592 | 773.6875 | 803.6875 | |
| | General Use | Voice 25KHz | 629-632 | 773.9375 | 803.9375 | |
| | General Use | Voice 25KHz | 673-676 | 774.2125 | 804.2125 | |
| | General Use | Voice 25KHz | 797-800 | 774.9875 | 804.9875 | |
| | General Use | Voice 25KHz | 837-840 | 775.2375 | 805.2375 | |
| | General Use | Voice 25KHz | 905-908 | 775.6625 | 805.6625 | |
| | General Use | Voice 25KHz | 945-948 | 775.9125 | 805.9125 | |
| Litchfield County, Connecticut | General Use | Voice 25KHz | 337-340 | 766.1125 | 796.1125 | |
| | General Use | Voice 25KHz | 429-432 | 766.6875 | 796.6875 | |
| | General Use | Voice 25KHz | 469-472 | 766.9375 | 796.9375 | |
| | General Use | Voice 25KHz | 493-496 | 773.0875 | 803.0875 | |
| | General Use | Voice 25KHz | 561-564 | 773.5125 | 803.5125 | |
| | General Use | Voice 25KHz | 621-624 | 773.8875 | 803.8875 | |
| | General Use | Voice 25KHz | 781-784 | 774.8875 | 804.8875 | |
| Middlesex Connecticut | General Use | Voice 25KHz | 177-180 | 765.1125 | 795.1125 | |
| | General Use | Voice 25KHz | 285-288 | 765.7875 | 795.7875 | |
| | General Use | Voice 25KHz | 389-392 | 766.4375 | 796.4375 | |
| | General Use | Voice 25KHz | 441-444 | 766.7625 | 796.7625 | |
| | General Use | Voice 25KHz | 533-536 | 773.3375 | 803.3375 | |
| | General Use | Voice 25KHz | 609-612 | 773.8125 | 803.8125 | |
| New Haven Connecticut | General Use | Voice 25KHz | 13-16 | 764.0875 | 794.0875 | |
| | General Use | Voice 25KHz | 53-56 | 764.3375 | 794.3375 | |
| | General Use | Voice 25KHz | 93-96 | 764.5875 | 794.5875 | |
| | General Use | Voice 25KHz | 137-140 | 764.8625 | 794.8625 | |
| | General Use | Voice 25KHz | 213-216 | 765.3375 | 795.3375 | |
| | General Use | Voice 25KHz | 329-332 | 766.0625 | 796.0625 | |

| County | Class | Band Width | FCC | Base | Mobile | Notation |
|---|---|---|---|---|---|---|
| | General Use | Voice 25KHz | 377-380 | 766.3625 | 796.3625 | |
| | General Use | Voice 25KHz | 417-420 | 766.6125 | 796.6125 | |
| | General Use | Voice 25KHz | 461-464 | 766.8875 | 796.8875 | |
| | General Use | Voice 25KHz | 481-484 | 773.0125 | 803.0125 | |
| | General Use | Voice 25KHz | 549-552 | 773.4375 | 803.4375 | |
| | General Use | Voice 25KHz | 597-600 | 773.7375 | 803.7375 | |
| | General Use | Voice 25KHz | 637-640 | 773.9875 | 803.9875 | |
| | General Use | Voice 25KHz | 713-716 | 774.4625 | 804.4625 | |
| | General Use | Voice 25KHz | 753-756 | 774.7125 | 804.7125 | |
| | General Use | Voice 25KHz | 821-824 | 775.1375 | 805.1375 | |
| | General Use | Voice 25KHz | 865-868 | 775.4125 | 805.4125 | |
| New London Connecticut | General Use | Voice 25KHz | 161-164 | 765.0125 | 795.0125 | |
| | General Use | Voice 25KHz | 349-352 | 766.1875 | 796.1875 | |
| | General Use | Voice 25KHz | 425-428 | 766.6625 | 796.6625 | |
| | General Use | Voice 25KHz | 517-520 | 773.2375 | 803.2375 | |
| | General Use | Voice 25KHz | 577-580 | 773.6125 | 803.6125 | |
| | General Use | Voice 25KHz | 617-620 | 773.8625 | 803.8625 | |
| | General Use | Voice 25KHz | 661-664 | 774.1375 | 804.1375 | |
| | General Use | Voice 25KHz | 705-708 | 774.4125 | 804.4125 | |
| | General Use | Voice 25KHz | 785-788 | 774.9125 | 804.9125 | |
| | General Use | Voice 25KHz | 873-876 | 775.4625 | 805.4625 | |
| Tolland County, Connecticut | General Use | Voice 25KHz | 253-256 | 765.5875 | 795.5875 | |
| | General Use | Voice 25KHz | 357-360 | 766.2375 | 796.2375 | |
| | General Use | Voice 25KHz | 401-404 | 766.5125 | 796.5125 | |
| | General Use | Voice 25KHz | 489-492 | 773.0625 | 803.0625 | |
| | General Use | Voice 25KHz | 553-556 | 773.4625 | 803.4625 | |
| | General Use | Voice 25KHz | 601-604 | 773.7625 | 803.7625 | |
| Windham Connecticut | General Use | Voice 25KHz | 385-388 | 766.4125 | 796.4125 | |
| | General Use | Voice 25KHz | 445-448 | 766.7875 | 796.7875 | |
| | General Use | Voice 25KHz | 505-508 | 773.1625 | 803.1625 | |
| | General Use | Voice 25KHz | 593-596 | 773.7125 | 803.7125 | |
| | General Use | Voice 25KHz | 793-796 | 774.9625 | 804.9625 | |
| | General Use | Voice 25KHz | 901-904 | 775.6375 | 805.6375 | |
| | General Use | Voice 25KHz | 941-944 | 775.8875 | 805.8875 | |
| Barnstable Massachusetts | General Use | Voice 25KHz | 57-60 | 764.3625 | 794.3625 | |
| | General Use | Voice 25KHz | 125-128 | 764.7875 | 794.7875 | |
| | General Use | Voice 25KHz | 165-168 | 765.0375 | 795.0375 | |
| | General Use | Voice 25KHz | 213-216 | 765.3375 | 795.3375 | |
| | General Use | Voice 25KHz | 253-256 | 765.5875 | 795.5875 | |
| | General Use | Voice 25KHz | 297-300 | 765.8625 | 795.8625 | |
| | General Use | Voice 25KHz | 337-340 | 766.1125 | 796.1125 | |
| | General Use | Voice 25KHz | 377-380 | 766.3625 | 796.3625 | |
| | General Use | Voice 25KHz | 433-436 | 766.7125 | 796.7125 | |
| | General Use | Voice 25KHz | 477-480 | 766.9875 | 796.9875 | |
| | General Use | Voice 25KHz | 481-484 | 773.0125 | 803.0125 | |
| | General Use | Voice 25KHz | 541-544 | 773.3875 | 803.3875 | |
| | General Use | Voice 25KHz | 617-620 | 773.8625 | 803.8625 | |
| | General Use | Voice 25KHz | 661-664 | 774.1375 | 804.1375 | |

| County | Class | Band Width | FCC | Base | Mobile | Notation |
|---|---|---|---|---|---|---|
| | General Use | Voice 25KHz | 713-716 | 774.4625 | 804.4625 | |
| | General Use | Voice 25KHz | 785-788 | 774.9125 | 804.9125 | |
| | General Use | Voice 25KHz | 877-880 | 775.4875 | 805.4875 | |
| | General Use | Voice 25KHz | 917-920 | 775.7375 | 805.7375 | |
| Berkshire County, Massachusetts | General Use | Voice 25KHz | 169-172 | 765.0625 | 795.0625 | |
| | General Use | Voice 25KHz | 249-252 | 765.5625 | 795.5625 | |
| | General Use | Voice 25KHz | 325-328 | 766.0375 | 796.0375 | |
| | General Use | Voice 25KHz | 381-384 | 766.3875 | 796.3875 | |
| | General Use | Voice 25KHz | 437-440 | 766.7375 | 796.7375 | |
| | General Use | Voice 25KHz | 513-516 | 773.2125 | 803.2125 | |
| | General Use | Voice 25KHz | 581-584 | 773.6375 | 803.6375 | |
| | General Use | Voice 25KHz | 705-708 | 774.4125 | 804.4125 | |
| | General Use | Voice 25KHz | 861-864 | 775.3875 | 805.3875 | |
| Bristol County, Massachusetts | General Use | Voice 25KHz | 53-56 | 764.3375 | 794.3375 | |
| | General Use | Voice 25KHz | 129-132 | 764.8125 | 794.8125 | |
| | General Use | Voice 25KHz | 173-176 | 765.0875 | 795.0875 | |
| | General Use | Voice 25KHz | 285-288 | 765.7875 | 795.7875 | |
| | General Use | Voice 25KHz | 381-384 | 766.3875 | 796.3875 | |
| | General Use | Voice 25KHz | 429-432 | 766.6875 | 796.6875 | |
| | General Use | Voice 25KHz | 473-476 | 766.9625 | 796.9625 | |
| | General Use | Voice 25KHz | 493-496 | 773.0875 | 803.0875 | |
| | General Use | Voice 25KHz | 545-548 | 773.4125 | 803.4125 | |
| | General Use | Voice 25KHz | 613-616 | 773.8375 | 803.8375 | |
| | General Use | Voice 25KHz | 669-672 | 774.1875 | 804.1875 | |
| | General Use | Voice 25KHz | 781-784 | 774.8875 | 804.8875 | |
| | General Use | Voice 25KHz | 869-872 | 775.4375 | 805.4375 | |
| Dukes County, Massachusetts | General Use | Voice 25KHz | 41-44 | 764.2625 | 794.2625 | |
| | General Use | Voice 25KHz | 97-100 | 764.6125 | 794.6125 | |
| | General Use | Voice 25KHz | 137-140 | 764.8625 | 794.8625 | |
| | General Use | Voice 25KHz | 241-244 | 765.5125 | 795.5125 | |
| | General Use | Voice 25KHz | 345-348 | 766.1625 | 796.1625 | |
| | General Use | Voice 25KHz | 393-396 | 766.4625 | 796.4625 | |
| | General Use | Voice 25KHz | 465-468 | 766.9125 | 796.9125 | |
| | General Use | Voice 25KHz | 533-536 | 773.3375 | 803.3375 | |
| | General Use | Voice 25KHz | 585-588 | 773.6625 | 803.6625 | |
| | General Use | Voice 25KHz | 633-636 | 773.9625 | 803.9625 | |
| | General Use | Voice 25KHz | 701-704 | 774.3875 | 804.3875 | |
| | General Use | Voice 25KHz | 757-760 | 774.7375 | 804.7375 | |
| | General Use | Voice 25KHz | 797-800 | 774.9875 | 804.9875 | |
| | General Use | Voice 25KHz | 837-840 | 775.2375 | 805.2375 | |
| | General Use | Voice 25KHz | 905-908 | 775.6625 | 805.6625 | |
| | General Use | Voice 25KHz | 945-948 | 775.9125 | 805.9125 | |
| Essex County, Massachusetts | General Use | Voice 25KHz | 41-44 | 764.2625 | 794.2625 | |
| | General Use | Voice 25KHz | 81-84 | 764.5125 | 794.5125 | |
| | General Use | Voice 25KHz | 121-124 | 764.7625 | 794.7625 | |
| | General Use | Voice 25KHz | 161-164 | 765.0125 | 795.0125 | |
| | General Use | Voice 25KHz | 205-208 | 765.2875 | 795.2875 | |
| | General Use | Voice 25KHz | 253-256 | 765.5875 | 795.5875 | |

| County | Class | Band Width | FCC | Base | Mobile | Notation |
|---|---|---|---|---|---|---|
| | General Use | Voice 25KHz | 361-364 | 766.2625 | 796.2625 | |
| | General Use | Voice 25KHz | 425-428 | 766.6625 | 796.6625 | |
| | General Use | Voice 25KHz | 501-504 | 773.1375 | 803.1375 | |
| | General Use | Voice 25KHz | 541-544 | 773.3875 | 803.3875 | |
| | General Use | Voice 25KHz | 601-604 | 773.7625 | 803.7625 | |
| | General Use | Voice 25KHz | 821-824 | 775.1375 | 805.1375 | |
| | General Use | Voice 25KHz | 873-876 | 775.4625 | 805.4625 | |
| | General Use | Voice 25KHz | 913-916 | 775.7125 | 805.7125 | |
| Franklin County, Massachusetts | General Use | Voice 25KHz | 217-220 | 765.3625 | 795.3625 | |
| | General Use | Voice 25KHz | 333-336 | 766.0875 | 796.0875 | |
| | General Use | Voice 25KHz | 413-416 | 766.5875 | 796.5875 | |
| | General Use | Voice 25KHz | 565-568 | 773.5375 | 803.5375 | |
| | General Use | Voice 25KHz | 785-788 | 774.9125 | 804.9125 | |
| Hampden County, Massachusetts | General Use | Voice 25KHz | 17-20 | 764.1125 | 794.1125 | |
| | General Use | Voice 25KHz | 133-136 | 764.8375 | 794.8375 | |
| | General Use | Voice 25KHz | 289-292 | 765.8125 | 795.8125 | |
| | General Use | Voice 25KHz | 345-348 | 766.1625 | 796.1625 | |
| | General Use | Voice 25KHz | 393-396 | 766.4625 | 796.4625 | |
| | General Use | Voice 25KHz | 457-460 | 766.8625 | 796.8625 | |
| | General Use | Voice 25KHz | 521-524 | 773.2625 | 803.2625 | |
| | General Use | Voice 25KHz | 573-576 | 773.5875 | 803.5875 | |
| | General Use | Voice 25KHz | 613-616 | 773.8375 | 803.8375 | |
| | General Use | Voice 25KHz | 665-668 | 774.1625 | 804.1625 | |
| | General Use | Voice 25KHz | 869-872 | 775.4375 | 805.4375 | |
| Hampshire Massachusetts | General Use | Voice 25KHz | 85-88 | 764.5375 | 794.5375 | |
| | General Use | Voice 25KHz | 257-260 | 765.6125 | 795.6125 | |
| | General Use | Voice 25KHz | 373-376 | 766.3375 | 796.3375 | |
| | General Use | Voice 25KHz | 465-468 | 766.9125 | 796.9125 | |
| | General Use | Voice 25KHz | 557-560 | 773.4875 | 803.4875 | |
| | General Use | Voice 25KHz | 605-608 | 773.7875 | 803.7875 | |
| | General Use | Voice 25KHz | 717-720 | 774.4875 | 804.4875 | |
| | General Use | Voice 25KHz | 757-760 | 774.7375 | 804.7375 | |
| Middlesex Massachusetts | General Use | Voice 25KHz | 13-16 | 764.0875 | 794.0875 | |
| | General Use | Voice 25KHz | 57-60 | 764.3625 | 794.3625 | |
| | General Use | Voice 25KHz | 97-100 | 764.6125 | 794.6125 | |
| | General Use | Voice 25KHz | 137-140 | 764.8625 | 794.8625 | |
| | General Use | Voice 25KHz | 177-180 | 765.1125 | 795.1125 | |
| | General Use | Voice 25KHz | 241-244 | 765.5125 | 795.5125 | |
| | General Use | Voice 25KHz | 297-300 | 765.8625 | 795.8625 | |
| | General Use | Voice 25KHz | 337-340 | 766.1125 | 796.1125 | |
| | General Use | Voice 25KHz | 377-380 | 766.3625 | 796.3625 | |
| | General Use | Voice 25KHz | 441-444 | 766.7625 | 796.7625 | |
| | General Use | Voice 25KHz | 481-484 | 773.0125 | 803.0125 | |
| | General Use | Voice 25KHz | 525-528 | 773.2875 | 803.2875 | |
| | General Use | Voice 25KHz | 577-580 | 773.6125 | 803.6125 | |
| | General Use | Voice 25KHz | 617-620 | 773.8625 | 803.8625 | |
| | General Use | Voice 25KHz | 661-664 | 774.1375 | 804.1375 | |
| | General Use | Voice 25KHz | 709-712 | 774.4375 | 804.4375 | |

| County | Class | Band Width | FCC | Base | Mobile | Notation |
|---|---|---|---|---|---|---|
| | General Use | Voice 25KHz | 749-752 | 774.6875 | 804.6875 | |
| | General Use | Voice 25KHz | 789-792 | 774.9375 | 804.9375 | |
| | General Use | Voice 25KHz | 865-868 | 775.4125 | 805.4125 | |
| | General Use | Voice 25KHz | 905-908 | 775.6625 | 805.6625 | |
| | General Use | Voice 25KHz | 945-948 | 775.9125 | 805.9125 | |
| Nantucket Massachusetts | General Use | Voice 25KHz | 13-16 | 764.0875 | 794.0875 | |
| | General Use | Voice 25KHz | 89-92 | 764.5625 | 794.5625 | |
| | General Use | Voice 25KHz | 133-136 | 764.8375 | 794.8375 | |
| | General Use | Voice 25KHz | 173-176 | 765.0875 | 795.0875 | |
| | General Use | Voice 25KHz | 217-220 | 765.3625 | 795.3625 | |
| | General Use | Voice 25KHz | 281-284 | 765.7625 | 795.7625 | |
| | General Use | Voice 25KHz | 321-324 | 766.0125 | 796.0125 | |
| | General Use | Voice 25KHz | 361-364 | 766.2625 | 796.2625 | |
| | General Use | Voice 25KHz | 421-424 | 766.6375 | 796.6375 | |
| | General Use | Voice 25KHz | 473-476 | 766.9625 | 796.9625 | |
| | General Use | Voice 25KHz | 485-488 | 773.0375 | 803.0375 | |
| | General Use | Voice 25KHz | 525-528 | 773.2875 | 803.2875 | |
| | General Use | Voice 25KHz | 577-580 | 773.6125 | 803.6125 | |
| | General Use | Voice 25KHz | 637-640 | 773.9875 | 803.9875 | |
| | General Use | Voice 25KHz | 677-680 | 774.2375 | 804.2375 | |
| | General Use | Voice 25KHz | 741-744 | 774.6375 | 804.6375 | |
| | General Use | Voice 25KHz | 781-784 | 774.8875 | 804.8875 | |
| | General Use | Voice 25KHz | 825-828 | 775.1625 | 805.1625 | |
| | General Use | Voice 25KHz | 869-872 | 775.4375 | 805.4375 | |
| | General Use | Voice 25KHz | 913-916 | 775.7125 | 805.7125 | |
| Norfolk County, Massachusetts | General Use | Voice 25KHz | 85-88 | 764.5375 | 794.5375 | |
| | General Use | Voice 25KHz | 217-220 | 765.3625 | 795.3625 | |
| | General Use | Voice 25KHz | 257-260 | 765.6125 | 795.6125 | |
| | General Use | Voice 25KHz | 329-332 | 766.0625 | 796.0625 | |
| | General Use | Voice 25KHz | 413-416 | 766.5875 | 796.5875 | |
| | General Use | Voice 25KHz | 465-468 | 766.9125 | 796.9125 | |
| | General Use | Voice 25KHz | 513-516 | 773.2125 | 803.2125 | |
| | General Use | Voice 25KHz | 557-560 | 773.4875 | 803.4875 | |
| | General Use | Voice 25KHz | 605-608 | 773.7875 | 803.7875 | |
| | General Use | Voice 25KHz | 717-720 | 774.4875 | 804.4875 | |
| | General Use | Voice 25KHz | 757-760 | 774.7375 | 804.7375 | |
| | General Use | Voice 25KHz | 797-800 | 774.9875 | 804.9875 | |
| | General Use | Voice 25KHz | 837-840 | 775.2375 | 805.2375 | |
| Plymouth County, Massachusetts | General Use | Voice 25KHz | 17-20 | 764.1125 | 794.1125 | |
| | General Use | Voice 25KHz | 201-204 | 765.2625 | 795.2625 | |
| | General Use | Voice 25KHz | 245-248 | 765.5375 | 795.5375 | |
| | General Use | Voice 25KHz | 357-360 | 766.2375 | 796.2375 | |
| | General Use | Voice 25KHz | 445-448 | 766.7875 | 796.7875 | |
| | General Use | Voice 25KHz | 521-524 | 773.2625 | 803.2625 | |
| | General Use | Voice 25KHz | 597-600 | 773.7375 | 803.7375 | |
| | General Use | Voice 25KHz | 705-708 | 774.4125 | 804.4125 | |
| | General Use | Voice 25KHz | 745-748 | 774.6625 | 804.6625 | |
| | General Use | Voice 25KHz | 829-832 | 775.1875 | 805.1875 | |

| County | Class | Band Width | FCC | Base | Mobile | Notation |
|---|---|---|---|---|---|---|
| | General Use | Voice 25KHz | 901-904 | 775.6375 | 805.6375 | |
| | General Use | Voice 25KHz | 941-944 | 775.8875 | 805.8875 | |
| Suffolk County, Massachusetts | General Use | Voice 25KHz | 169-172 | 765.0625 | 795.0625 | |
| | General Use | Voice 25KHz | 289-292 | 765.8125 | 795.8125 | |
| | General Use | Voice 25KHz | 345-348 | 766.1625 | 796.1625 | |
| | General Use | Voice 25KHz | 405-408 | 766.5375 | 796.5375 | |
| | General Use | Voice 25KHz | 453-456 | 766.8375 | 796.8375 | |
| | General Use | Voice 25KHz | 489-492 | 773.0625 | 803.0625 | |
| | General Use | Voice 25KHz | 549-552 | 773.4375 | 803.4375 | |
| | General Use | Voice 25KHz | 589-592 | 773.6875 | 803.6875 | |
| | General Use | Voice 25KHz | 629-632 | 773.9375 | 803.9375 | |
| | General Use | Voice 25KHz | 673-676 | 774.2125 | 804.2125 | |
| Worcester Massachusetts | General Use | Voice 25KHz | 49-52 | 764.3125 | 794.3125 | |
| | General Use | Voice 25KHz | 125-128 | 764.7875 | 794.7875 | |
| | General Use | Voice 25KHz | 165-168 | 765.0375 | 795.0375 | |
| | General Use | Voice 25KHz | 209-212 | 765.3125 | 795.3125 | |
| | General Use | Voice 25KHz | 281-284 | 765.7625 | 795.7625 | |
| | General Use | Voice 25KHz | 321-324 | 766.0125 | 796.0125 | |
| | General Use | Voice 25KHz | 365-368 | 766.2875 | 796.2875 | |
| | General Use | Voice 25KHz | 421-424 | 766.6375 | 796.6375 | |
| | General Use | Voice 25KHz | 477-480 | 766.9875 | 796.9875 | |
| | General Use | Voice 25KHz | 497-500 | 773.1125 | 803.1125 | |
| | General Use | Voice 25KHz | 537-540 | 773.3625 | 803.3625 | |
| | General Use | Voice 25KHz | 585-588 | 773.6625 | 803.6625 | |
| | General Use | Voice 25KHz | 625-628 | 773.9125 | 803.9125 | |
| | General Use | Voice 25KHz | 701-704 | 774.3875 | 804.3875 | |
| | General Use | Voice 25KHz | 741-744 | 774.6375 | 804.6375 | |
| | General Use | Voice 25KHz | 825-828 | 775.1625 | 805.1625 | |
| | General Use | Voice 25KHz | 877-880 | 775.4875 | 805.4875 | |
| | General Use | Voice 25KHz | 917-920 | 775.7375 | 805.7375 | |
| Androscoggin Maine | General Use | Voice 25KHz | 137-140 | 764.8625 | 794.8625 | |
| | General Use | Voice 25KHz | 213-216 | 765.3375 | 795.3375 | |
| | General Use | Voice 25KHz | 289-292 | 765.8125 | 795.8125 | |
| | General Use | Voice 25KHz | 357-360 | 766.2375 | 796.2375 | |
| | General Use | Voice 25KHz | 397-400 | 766.4875 | 796.4875 | |
| | General Use | Voice 25KHz | 465-468 | 766.9125 | 796.9125 | |
| | General Use | Voice 25KHz | 481-484 | 773.0125 | 803.0125 | |
| | General Use | Voice 25KHz | 529-532 | 773.3125 | 803.3125 | |
| | General Use | Voice 25KHz | 581-584 | 773.6375 | 803.6375 | |
| | General Use | Voice 25KHz | 637-640 | 773.9875 | 803.9875 | |
| | General Use | Voice 25KHz | 741-744 | 774.6375 | 804.6375 | |
| Aroostook Maine | General Use | Voice 25KHz | 17-20 | 764.1125 | 794.1125 | |
| | General Use | Voice 25KHz | 57-60 | 764.3625 | 794.3625 | |
| | General Use | Voice 25KHz | 97-100 | 764.6125 | 794.6125 | |
| | General Use | Voice 25KHz | 169-172 | 765.0625 | 795.0625 | |
| | General Use | Voice 25KHz | 209-212 | 765.3125 | 795.3125 | |
| | General Use | Voice 25KHz | 249-252 | 765.5625 | 795.5625 | |
| | General Use | Voice 25KHz | 289-292 | 765.8125 | 795.8125 | |